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FIRST NAMED INVENTOR attorney docket no. SERIAL NUMBER FILING DATE 11/12/92 07/975,905 KLUG EXAMINER WANG, P SHERIDAN, ROSS AND MCINTOSH 23M3 PAPER NUMBER ART UNIT ONE NORWEST CENTER 1700 LINCOLN STREET **SUITE 3500** 2307 DATE WAILED: **DENVER, CO 80203** 03/18/93 This is a communication from the examiner in charge of your application. COMMISSIONER OF PATENTS AND TRADEMARKS Responsive to communication filed on 11/12/92 

This action is made final. A shortened statutory period for response to this action is set to expire \( \frac{\frac{1}{2}}{2} \) month(s), \_\_\_\_ Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133 THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION: Part I Notice of References Cited by Examiner, PTO-892. Notice of Art Cited by Applicant, PTO-1449. ☐ Information on How to Effect Drawing Changes, PTO-1474. 1. Claims 1-11, 13-15, 17-23, 25-26 are pending in the application.

Of the above, claims \_\_\_\_\_\_\_\_ are withdrawn from consideration. 2. Claims Claims /-// , /3-15 , /7-23 , 25-26 are rejected. Claims \_ 6. Claims\_ are subject to restriction or election requirement. 7. 🂢 This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes. 8. Formal drawings are required in response to this Office action. 9. The corrected or substitute drawings have been received on \_\_\_\_ . Under 37 C.F.R. 1.84 these drawings are acceptable. not acceptable (see explanation or Notice re Patent Drawing, PTO-948). 10. The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_\_ \_\_\_\_\_ has (have) been 🔲 approved by the examiner. disapproved by the examiner (see explanation). 11. The proposed drawing correction, filed on \_\_\_\_\_\_\_, has been approved. disapproved (see explanation). 12. Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has Deen received not been received \_\_\_\_\_; filed on \_

13. 🔲 Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in

14: 🔲 Other

been filed in parent application, serial no. \_\_\_

accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

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- 1. Claims 26 are presented for examination.
- 2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
- 3. The drawings are objected to under 37 C.F.R. § 1.84(g) because they lack suitable legends. Correction is required.
- 4. Claims 1-26 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the independent claims, "said remaining ones of said plurality of personal computers" lacks proper antecedent basis. The "remaining ones" means, literally, "all which remain," i.e., all which have hot been destroyed, removed, or otherwise made unavailable.

5. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

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- 6. Claims 1-26 are rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 4,641,274 to Swank.
- 7. With respect to claim 1, Swank taught the invention substantially as claimed, including the:
- [a] plurality of computers, at least one of which being designated host computer (col.3, lines 8-15) which coordinates editing comprising edits, which comprise less than an entire file (col.3, lines 41-45); and
- [b] interconnecting means for electrically interconnecting the host computer with the remaining computers (col.3, lines 15-18);
- 8. Swank did not specifically teach the multitasking means in the host computer or that the host computer could be a personal computer, but did teach, as an embodiment, that the host computer was an IBM System 370, a multi-user, hence a multitasking, system. Thus, the multitasking means is inherent in the teaching of Swank. Further, it was well-known in the art that personal computers (multi-tasking or otherwise) could be used as host computers (e.g. a file server in a local area network) in settings which do not require the resources of a mainframe. It would, therefore, have been obvious to one of ordinary skill in the art at the time of the invention to substitute a personal computer for the IBM System/370 in the invention of Swank in order to gain the well-known advantages associated with doing so, such as decreased expense, and lower space and power requirements.
- 9. With respect to clam 2, Swank did not teach the voice communications means for transmitting audio signals representative of any user's voice to each other.
- 10. The use of telephones for transmitting audio signals representative of users' voices to each other was well-known before the time of the invention. It would have been obvious to use a telephone at each computer site discuss the interactive editing taught by Swank because of the added convenience that verbal interaction would allow.
- 11. With respect to claims 3-6, Swank did not specifically mention that the interconnection means is a non-dedicated digital communications system, that it comprises the voice communications means, that the interconnecting means could be a plurality of modems, or that the interconnection means could be an integrated services digital network (ISDN). Swank did, however, teach the use of a communications link,

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including communications adapters (col.3, lines 15-16), which anticipates the use of analog telephone or data lines, digital telephone (i.e. non-dedicated) or data (e.g. ISDN) lines, and modems. Further, as a number of alternatives for the interconnection means has been claimed, it is apparent that they are construed to be equivalents, thus any particular choice would be an obvious one because they all serve the same function in Swank just as in the present invention.

- 11. With respect to claims 7-8, Swank did not teach the use of data compression in the modems, but modems with data compression were widely available before the time of the invention, and their associated advantages were well-known (see e.g. Buerger, D. "Buyers must bone up on complexities of 9,600-bps modem technology" <u>Infoworld</u>. Dec 7, 1987. p.18.). The choice of a modem with data compression means would have been obvious to one of ordinary skill in the art because of the improved throughput that the system would gain.
- 12. With respect to claims 9-11, 13-15, 17-23, and 25-26, see the discussions set forth hereinabove.
- 13. The prior art made of record and not presently relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,173,854 to Kaufman et al.

The teachings of this reference are essentially the same as in Swank except that Kaufman et al. transfer of only editing commands between host and terminal computers rather than the edited text as in Swank.

Pepper, J. "Hayes revs up its modem: V-Series features 9600 baud" Lotus. Jan 1988. pp.20-21.

Caine, S. "HST modem keeps users in the fast lane" <u>Digital Review</u>. Dec 16, 1987. p.12.

These references show the existence of modems with data compression before the time of the invention.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Y. Wang whose telephone number is (703) 305-7804. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

SUPERVISORY PATENT EXAMINER
GROUP 230

Peter Y. Wang March 15, 1993